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(54) **Three-wheeled vehicle**

(57) A three-wheel motor vehicle has a central rear wheel and spaced steerable front wheels which are driven by a front mounted transverse engine and transmission unit. This arrangement offers the combination of maximum stability and front wheel drive and steer with the maximum weight on the front wheels.

The key feature is the stability base correctly disposed in such manner that all weight transfer from back to front due to track gradient, forward or transverse, or braking is absorbed by a progressive width of base.

This stability feature automatically accommodates the front wheel drive and steer assembly which is incorporated in the transversely mounted engine and transmission unit which in turn meets the requirement of weight in front and the adhesion for driving, braking and steering.

All the components necessary for this front end design are already known and used on 4 wheeled chasses but the important stability feature is peculiar to the 3-wheeled chassis.

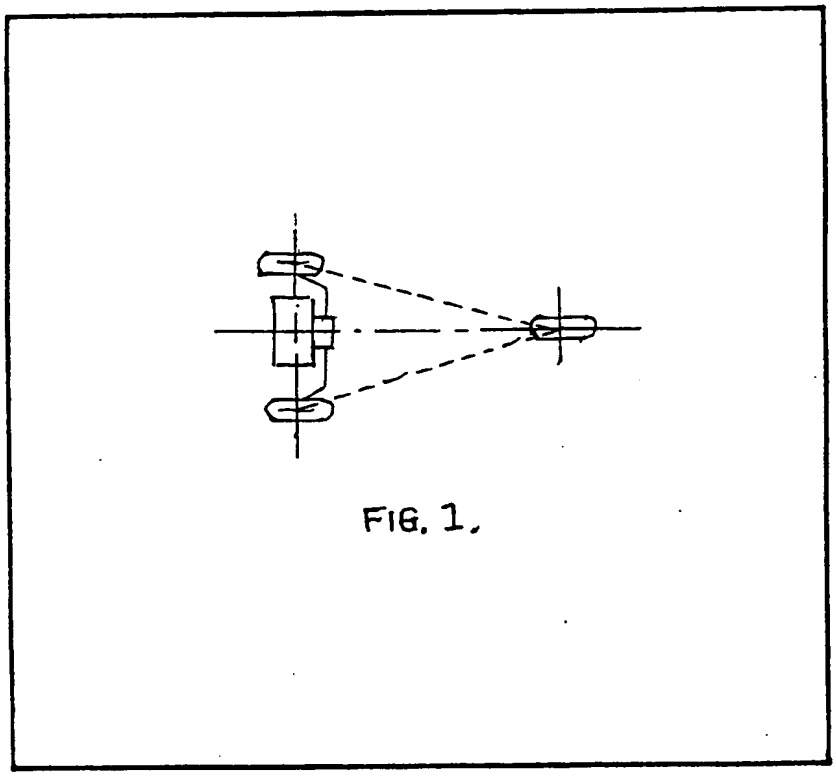

FIG. 1.

GB 2 111 442 A

The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

DRAWINGS- DIAGRAMMATIC

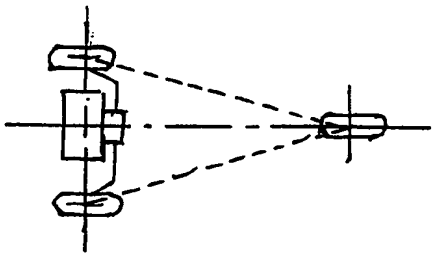

FIG. 1.

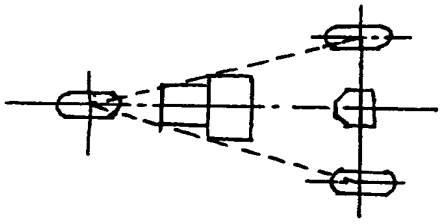

FIG. 2.

SPECIFICATION

Improved chassis for 3-wheeled vehicles

Technical field—motor cars

Background art—3-wheeled vehicles

The invention comprises a chassis for 3-wheeled self-propelled vehicles wherein all conditions essential for stability and positive and precise handling characteristics are secured by a combination of features which are purposely disposed in a particular relationship.

Stability demands that the stability base, a triangle formed by the position of the three wheels, be properly disposed in relation to the direction of normal travel and such that the base of the triangle is in front, in effect on the line of the front axle and with the apex at the rear.

Steering must be by the two front wheels, one single wheel does not have the adhesion to be effective.

Drive must be by the two front wheels, the chassis must be pulled and not pushed.

Chassis weight must be proportioned such that the major portion is on the front wheels.

These essential requirements can be satisfied completely by a combination of constructional features already known and presently used in a 4-wheeled chassis but never applied as a combination in any 3-wheeled chassis.

The invention applies to all classes of light vehicles on a 3-wheeled chassis, private, industrial, agricultural, and 'invalid' type carriages.

Diagrammatic sketches illustrate, Fig. 1 shows this inventibn and Fig. 2 shows vehicles in present production for private and light industrial use and separately for invalid type carriages.

Claims

1. The invention is a 3-wheeled chassis comprising a forwardly mounted transverse engine and transmission unit incorporating axle shafts arranged for driving and steering and the front axle hubs attached by independent suspension mountings. The steering movement is by a rack and pinion assembly forming part of the main unit.

The rear wheel is centrally disposed on the chassis axis and is attached by a trailing arm sprung mounting.

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